

## REMARKS

After entry of this amendment, claims 1, 3-29, 32 and 33 will be pending. Claims 2, 30 and 31 have been cancelled. Claims 1, 3-5, 10, 13, 18-22, 24, 29, 32 and 33 have been amended. Claims 1 and 29 have been amended to incorporate the subject matter of claims 2 and 30, respectively. Claim 10 has been amended to make it independent by incorporating the subject matter from original claim 1. Claim 18 has been amended to broaden the claim by moving the plastic requirement to each layer, as opposed to having the overall energy absorber being required to be plastic. Claim 24 has been amended to correct an antecedent basis problem. Other amendments to the claims are minor in nature and serve to fix dependencies or typographical errors. No new matter has been added.

### Rejections under 35 USC §112 ¶ 2

The Examiner rejected claims 5-7, 13-15, and 19-22 as being indefinite for failing to particularly point out and distinctly claim the subject matter of Applicants' invention.

Examiner cited the text "and combinations thereof" as being the basis for this rejection of claims 5, 6, 13, 14, 19, and 20. Applicants assert that the text was quoted inaccurately. In fact, the pertinent text of the claims reads "or combinations thereof." Applicants assert that the claims sufficiently describe the metes and bounds of Applicants' invention and rejection under §112 ¶ 2 is improper. See MPEP §2173.05(h). Applicants respectfully request that Examiner withdraw this rejection.

### Rejections under 35 U.S.C. §103(a)

The Examiner rejected claims 1-33 as obvious over U.S. Pat. No. 4,852,704 to Brockenbrough et al. ("Brockenbrough") in view of U.S. Pat. No. 5,011,642 to Welygan et al. ("Welygan"). This rejection is traversed.

Applicants agree with the Examiner that Brockenbrough does not teach an energy absorber comprising an extruded plastic first layer. With regard to claims 10, 18 and 24, contrary to the assertion of the Examiner, there is a lack of motivation to combine the references. In particular, the necessary motivation is to substitute plastic for metal layers. Such motivation is lacking in Brockenbrough. Brockenbrough only discusses layers of metal strips and does not suggest replacing of metal with plastic. Welygan suffers similar deficiencies in motivation. Welygan does not suggest the replacement of metal with plastic. The Examiner is kindly requested to produce evidence of motivation to combine the references found in the skill in the art under MPEP §2144.03 (c). Thus, the Examiner failed to create a *prima facie* case of obviousness showing replacement of metal layer with plastic layers. Applicants respectfully request that this rejection be withdrawn.

With regard to amended claims 1 and 29, neither Brockenbrough nor Welygan teaches or suggests the use of a hinge, and thus, fail to show each element of the claims. Applicants respectfully request that rejection of these claims be withdrawn.

With regard to claims 17, 23, 24, and 28<sup>1</sup>, the Examiner asserts that the differing compositions of the layers would have been obvious because the Applicants have not disclosed that having different compositions solves any stated problem. Applicants respectfully assert that the Examiner is impermissibly placing the burden on the Applicants to show non-obviousness. Applicants are entitled to a patent unless the Examiner establishes an unrebutted *prima facie* case of obviousness. MPEP §2144.

Even so, the Examiner mischaracterized the specification. Specifically, Applicants do discuss the benefits of having layers of different materials as seen in paragraph [0048]. Applicants respectfully request that rejection of these claims be withdrawn.

Moreover, with regard to claims 7, 15 and 21, the references do not disclose the use of friction as an energy absorption means. At best, Brockenbrough discusses in two places the importance of friction during the manufacture of his energy absorber. For example, at col. 4, lines 36-55, Brockenbrough states:

The top die strikers in each row, i.e., for forming each strip, are adjusted to control their time of downward motion relative to each other. This is necessary to provide equal "draw-in" of the strip from each of the opposed ends of the die during the forming operation so as not to incur excessive stretching of the metal. This is crucial to proper performance of the assembled barrier device by retaining as much ductility as possible for potential elongation of the strips upon impact. Proper fine adjustment of striker height will provide controlled "hold-down" of the strip to achieve the desired amount of frictional sliding of the strip in the die for precise yielding of the strip and a reliable ultimate shape after forming. Ideally, if there is an odd number of corrugations, the center striker or punch of the row thereof for forming each strip will fully engage the strip and other die first and then symmetrical pairs, i.e., on opposite sides of the center striker, will engage with the end strikers being last to engage and form the strip. (emphasis added).

Consequently, Brockenbrough does not teach or suggest the use of friction as a technique for dissipating impact energy. Because all of the elements of these claims are not taught or suggested by the references, Applicants respectfully request that this rejection be withdrawn.

For at least these reasons, Applicants respectfully request that the Examiner withdraw this rejection.

## CONCLUSIONS

The Examiner's rejections are traversed or are moot. Accordingly, Applicants submit that the present application is in condition for allowance and requests that the Examiner pass the case to issue at the earliest convenience. Should the Examiner have any

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<sup>1</sup> Claim 9 also relates to differing compositions between the layers, but it is not mentioned by the Examiner.

question or wish to further discuss this application, Applicant requests that the Examiner contact the undersigned at (248) 292-2920.

If for some reason Applicants have not requested a sufficient extension and/or have not paid a sufficient fee for this response and/or for the extension necessary to prevent the abandonment of this application, please consider this as a request for an extension for the required time period and/or authorization to charge Deposit Account No. 04-1512 for any fee which may be due.

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